

73. The computer system of claim 72, wherein the first process identifies the owner process using the ghost lock by finding the ghost lock among a plurality of resource locks based upon a resource identifier and obtaining the owner process from the owner indicator field of the ghost lock.

74. The computer system of claim 72, wherein the first process converts the ghost lock to a reference lock by initializing all uninitialized fields of the lock.

REMARKS

1. Claims 1-40 were pending in this application. Claims 1-40 have been canceled without prejudice. New claims 41-74 have been added. Therefore, claims 41-74 are now pending in this application.
2. The Examiner rejected claims 1-40 under 35 U.S.C. 103(a) as being unpatentable over Tucker (US Patent No. 6,223,204).
3. Claims 1-40 have been canceled without prejudice.
4. Applicant respectfully submits that new claims 41-74 are patentable over Tucker. In Tucker, it appears that a single mutex lock structure is created for the resource, and the mutex lock structure is used to coordinate access to the resource. In the current claims, a ghost lock is created by a process that does not require access to the resource upon receiving an inquiry from another process regarding ownership of the resource. The ghost lock is an incomplete instantiation of a resource lock in that it does not include all information necessary for accessing the resource, and in fact is not actually used to access the resource. Instead, the ghost lock is used by the process that created it to identify the owner process if and when the process needs to access the resource. In this

way, the process does not need to send out one or more inquiry messages when it needs to access the resource. Among other things, this saves time and reduces inter-process communication overhead.

The process that creates the ghost lock needs to determine the owner process for the resource. In a system having only two processes, the owner process can be implied, since the resource will be owned by the process that sent the inquiry if it is not already owned by the process that received the inquiry. In a system having more than two processes, the process that sent the inquiry may need to send additional inquiries in order to determine whether it or another process owns the resource, and an owner notification message is sent to the non-owner processes to inform them of the identity of the owner process.

5. Claims 41-74 are pending in this application. All pending claims are believed to be in a form suitable for allowance. Therefore, the application is believed to be in a condition for allowance. The Applicant respectfully requests early allowance of the application. The Applicant requests that the Examiner contact the undersigned, Jeffrey T. Klayman, if it will assist further examination of this application.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Jeffrey T. Klayman", with a stylized flourish at the end.

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